Docket No.: SON-2196
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
S. NEGISHI, et al.

Application No.: 09/931,577 | Confirmation No.: 2196

Filed: August 17, 2001 | Art Unit: 2424

For: DATA TRANSMISSION SYSTEM, DATA TRANSMITTING APPARATUS AND METHOD, AND SCENE DESCRIPTION UNIT AND METHOD | Examiner: M. P. Vanhandel

REPLY BRIEF TO EXAMINER'S ANSWER

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This is a Reply Brief under 37 C.F.R. §41.41 in response to the Examiner's Answer mailed on May 14, 2008.

All arguments presented within the Appeal Brief of July 16, 2007 are incorporated herein by reference. Additional arguments are provided below.

GROUNDS OF REJECTION:

The issues presented for consideration in this appeal are as follows:

Whether the Examiner erred in rejecting claims 27-30, 32-39, and 95-104 under 35 U.S.C. § 102 as unpatentable over U.S. Patent No. 5,953,506 to Kalra et al. ("Kalra").

Whether the Examiner erred in rejecting claims 1, 14, 27-30, 32-43, 45, 46, 48-52, 78, 105-115 under 35 U.S.C. § 103 over Kalra in view of The Background Of The Invention section of the specification for the present application ("AAPA").

These issues will be discussed herein below.

ARGUMENT

In the Final Office Action of April 30, 2008:

The Examiner erred in rejecting claims 27-30, 32-39, and 95-104 under 35 U.S.C. § 102 as unpatentable over U.S. Patent No. 5,953,506 to Kalra et al. ("Kalra").

The Examiner erred in rejecting claims 1, 14, 27-30, 32-43, 45, 46, 48-52, 78, 105-115 under 35 U.S.C. § 103 over Kalra in view of The Background Of The Invention section of the specification for the present application ("AAPA").

For at least the following reasons, Appellant submits that this rejection is both technically and legally unsound and should therefore be reversed.

For purposes of this appeal brief only, and without conceding the teachings of any prior art reference, the claims have been grouped as indicated below.

1. **The Examiner erred in rejecting claims 27-30, 32-39, and 95-104 under 35 U.S.C. § 102 as unpatentable over U.S. Patent No. 5,953,506 to Kalra et al. ("Kalra").**

Claims 27-30, 32, 35-39 - Claims 28-30, 32, 34-39 are dependent upon claim 27. Claim 27 is drawn to a data transmitting apparatus for transmitting a scene description that describes at least one elementary stream (ES) used to construct a scene, comprising:

> an ES processing means that transfers at least one ES, which conforms to at least one of a transmission line state and a request issued from a receiving side;
>
> a scene description processing means for transferring and modifying a scene description, in accordance with the at least one ES from the ES processing means, by adjusting the properties assigned to the ES within the scene description.

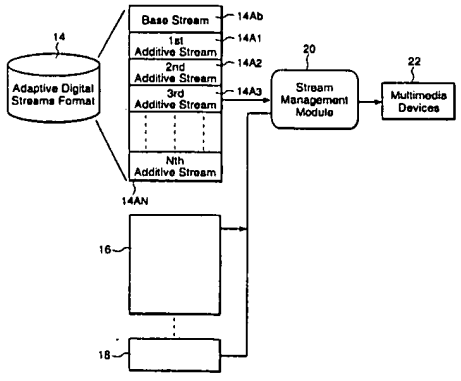
Kalra - Fig. 2A of Kalra illustrates a Scalable Media Delivery System.

Kalra discloses a system adapted to adjust a media stream transmitted to a client based on a client profile, which may include data relating to the client's data bandwidth and processing capabilities.

Element 14A, in Fig. 2A, illustrates an Adaptive Digital Stream. Fig. 1 illustrates that this adaptive stream is produced by transcoder 10 from a Standard Digital Media 12.

The Adaptive Digital Stream 14 includes a Basic Stream 14Ab having the essential portions of the data, and a series of Additive Streams 14A1-14AN which augment the Basic Stream 14Ab and are made available to the client based on the client profile.

Fig. 2A



The media streams may include 3D, audio, or video streams tailored based on the client profile. Standard

Digital Media 12 will generally be MPEG data, while the 3D stream is generally modified VRML.

With respect to claim 27, Kalra fails to teach or suggest "*an ES processing means that transfers at least one ES, which conforms to at least one of a transmission line state and a request issued from a receiving side [and] a scene description processing means for transferring and modifying a scene description, in accordance with the at least one ES from the ES processing means, by adjusting the properties assigned to the ES within the scene description...*"

Claim 27 discloses a transmitting apparatus having an elementary stream (ES) processing means and a scene description processing means. The elementary stream (ES) processing means "*transfers at least one ES, which conforms to at least one of a transmission line state and a request issued from a receiving side.*" The scene description processing means "*transfer[s] and modif[ies] a scene description, in accordance with the at least one ES from the ES processing means, by adjusting the properties assigned to the ES within the scene description.*" As such, the claims distinguish the elementary stream from the scene description, in that the scene description is modified "*by adjusting the properties assigned to the ES within the scene description.*"

In rejecting the ES processing means the Final Office Action recites:

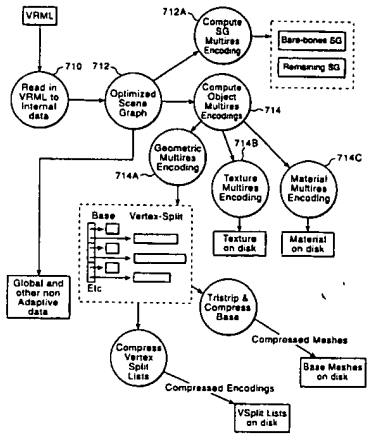
- a scene description processing means that transfers and modifies a scene description to conform to a corresponding quality of the at least one ES from the ES processing means by adjusting the properties assigned to the ES within the scene description (col. 19,1. 47-64; col. 21, 1. 61-67; col. 22, 1. 37-53; & Fig. 17).

The cited portion of Kalra, from column 19-22 refers to the modifications made to a VRML format to create an adaptive stream (see Fig. 1).

Columns 19-22 discuss how a 3D media stream originates as a single VRML media and is converted into a 3-D Adaptive Media Stream by the flowchart process shown in Fig. 17.

Particularly evident is the lack of *separate elementary streams and scene descriptions*. This is because the Office Action argues that these are the same object, ie., the VRML format.

Fig. 17



In setting forth the argument that claim 1 is obviated by Kalra, the Office Action mistakenly attempts to imply that the VRML format is separate from the adaptive media stream, whereas columns 19-22 explain that the VRML format becomes the Adaptive Media Stream.

This is further illustrated in Fig. 17, which shows a flowchart of the transcoding process for converting a VRML format into an adaptive stream format, furthering the process illustrated in Fig. 1. While Kalra does discuss compression of the VRML format, Kalra fails to disclose that both elementary streams and a scene description.

The claim recites "*a scene description processing means that transfers and modifies a scene description to conform to a corresponding quality of the at least one ES [] **by adjusting the properties assigned to the ES within the scene description***." This language distinguished the scene description from the media stream and identifies the media stream as having properties assigned to it within the scene description. As such, two pieces of data (i) the elementary stream and (ii) the scene description are recited.

This relationship is wholly absent in Kalra, where in columns 19-22, the VRML media is the media stream being modified. There is no second object being modified to account for the modified VRML data, and the VRML data is not modified to adjust the properties of another media stream.

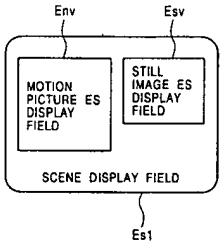
Instead, the VRML is modified to match a user profile. This is similar to the earlier portions of Kalra that discuss modifying an MPEG video stream based on the client profile.

No where does Kalra identify separate elements comparable to the scene description and ES.

Furthermore, even if Kalra suggests both a scene description and the corresponding ESes, Kalra still fails to teach or suggest a "*scene description processing means [that]... modif[ies] a scene description, in accordance with the at least one ES from the ES processing means, by adjusting the properties assigned to the ES within the scene description.*"

While Kalra recognizes the need to optimize and compress information transmitted from a server to a client. Kalra fails to recognize that the compression and reduction in data may require that the scene (or layout) of the data be modified to provide the user with a consistent and functional viewing experience.

FIG. 2



By example, Figs. 2 and 4 of the present application illustrate how the scene description is modified to account for changes in the ES.

Fig. 2 (left) illustrates an unadjusted scene Es1 having two ESes (Env and Esv).

FIG. 4

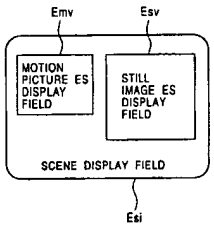


Fig. 4 illustrates the same scene having been adjusted for a low bandwidth transmission. To compensate for the low bandwidth, Env (video content) size was reduced, and Esv (still image content) was increased in size to account for the extra space left by the reduced Env.

Similarly, the scene description was modified to shift the position of Env and Esv to account for their changed size; in Fig. 4, Esv is provided with a larger view area beginning at a location that is shifted left from where it is in Fig. 2, and Env is allocated a smaller portion of the screen to prevent stretching of the video content.

By distinction, when Kalra downgrades or upgrades the quality of video or image content within a Media Stream, Kalra does not modify the placement of the video or image content

to account for changes in the quality of the video or image content. Kalra simply compresses this information in place. By contrast, claim 27 recites "*adjusting the properties assigned to the ES within the scene description,*" thereby recognizing that the scene description is adjusted to account for the changes to the ES.

Claim 33 - Claim 33 is drawn to a data transmitting apparatus according to Claim 27, further comprising:

> wherein the scene description processing means transfers a scene description that specifies whether the at least one ES is to be used to construct a scene are used or not.

Kalra - Kalra does not teach or suggest "wherein the scene description processing means transfers a scene description that specifies whether the at least one ES is to be used to construct a scene are used or not."

The Office Action cites to columns 21-22 of Kalra as the basis for rejecting claim 33.

However, as before, this rejection fails to distinguish between the scene description and the elementary stream. Columns 21-22 discuss the process by which the VRML media becomes an Adaptive Media Stream.

This adaptive stream data allows for a reduced data stream to be sent to the client.

However, Kalra is deficient with respect to the "scene description."

That is, there is no scene description that is separate from the media stream, that is sent to the client or that is modified based on the media stream.

Furthermore, there is no component of the VRML format that shows a situation where a stream is simply removed from the VRML. As illustrated in Fig. 17 of Kalra, content is compressed for different transfer states, but not removed.

Claim 34 is drawn to a data transmitting apparatus according to Claim 27, wherein the scene description processing means transfers a scene description whose complexity conforms to the at least one ES.

Kalra - Kalra does not teach or suggest that "*the scene description processing means transfers a scene description whose complexity conforms to the at least one ES.*"

That is, Kalra does not tie that complexity of the scene description to the ES. While Kalra discloses adjusting the resolution of the various components of the VRML data to conform to a transmission capacity, Kalra does not recognize the benefit of changing a scene description based on the changes to the ESes within the scene.

Claims 95-98, 100-104 - Claims 96-98, 100-104 are dependent upon claim 95. Claim 95 is drawn to a data receiving apparatus for receiving a scene description that describes at least one elementary stream (ES) used to construct a scene, comprising:

> an ES decoding unit that receives at least one ES, which conforms to at least one of a transmission line state and a request issued from the data receiving apparatus;
>
> a scene description decoding unit for constructing a scene description, in which the properties assigned to the ES within the scene description conform to the at least one ES.

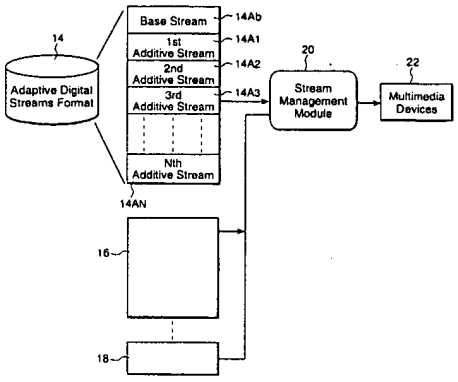
Kalra - Fig. 2A of Kalra illustrates a Scalable Media Delivery System.

Kalra discloses a system adapted to adjust a media stream transmitted to a client based on a client profile, which may include data relating to the client's data bandwidth and processing capabilities.

Element 14A, in Fig. 2A, illustrates an Adaptive Digital Stream. Fig. 1 illustrates that this adaptive stream is produced by transcoder 10 from a Standard Digital Media 12.

The Adaptive Digital Stream 14 includes a Basic Stream 14Ab having the essential portions of the data, and a series of Additive Streams 14A1-14AN which augment the Basic Stream 14Ab and are made available to the client based on the client profile.

Fig. 2A



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In rejecting the ES processing means the Final Office Action recites:

- a scene description processing means that transfers and modifies a scene description to conform to a corresponding quality of the at least one ES from the ES processing means by adjusting the properties assigned to the ES within the scene description (col. 19,1. 47-64; col. 21, 1. 61-67; col. 22, 1. 37-53; & Fig. 17).

The cited portion of Kalra, from column 19-22 refers to the modifications made to a VRML format to create an adaptive stream (see Fig. 1).

Columns 19-22 discuss how a 3D media stream originates as a single VRML media and is converted into a 3-D Adaptive Media Stream by the flowchart process shown in Fig. 17.

Particularly evident is the lack of *separate elementary streams and scene descriptions.* This is because the Office Action argues that these are the same object, ie., the VRML format.

In setting forth the argument that claim 1 is obviated by Kalra, the Office Action mistakenly attempts to imply that the VRML format is separate from the adaptive media stream, whereas columns 19-22 explain that the VRML format becomes the Adaptive Media Stream.

This is further illustrated in Fig. 17, which shows a flowchart of the transcoding process for converting a VRML format into an adaptive stream format, furthering the process illustrated in Fig. 1.

While Kalra does discuss compression of the VRML format, Kalra fails to disclose that both elementary streams and a scene description.

The claim recites "*a scene description processing means that transfers and modifies a scene description to conform to a corresponding quality of the at least one ES [] **by adjusting the properties assigned to the ES within the scene description***."

This language distinguished the scene description from the media stream and identifies the media stream as having properties assigned to it within the scene description.

As such, two pieces of data (i) the elementary stream and (ii) the scene description are recited.

This relationship is wholly absent in Kalra, where in columns 19-22, the VRML media is the media stream being modified. There is no second object being modified to account for the modified VRML data, and the VRML data is not modified to adjust the properties of another media stream.

Instead, the VRML is modified to match a user profile. This is similar to the earlier portions of Kalra that discuss modifying an MPEG video stream based on the client profile.

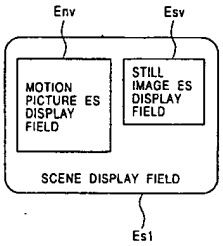
No where does Kalra identify separate elements comparable to the scene description and ES.

Furthermore, even if Kalra suggests both a scene description and the corresponding ESes, Kalra still fails to teach or suggest a "*scene description processing means [that]... modif[ies]*

a scene description, in accordance with the at least one ES from the ES processing means, by adjusting the properties assigned to the ES within the scene description."

While Kalra recognizes the need to optimize and compress information transmitted from a server to a client. Kalra fails to recognize that the compression and reduction in data may require that the scene (or layout) of the data be modified to provide the user with a consistent and functional viewing experience.

FIG. 2



By example, Figs. 2 and 4 of the present application illustrate how the scene description is modified to account for changes in the ES.

Fig. 2 (left) illustrates an unadjusted scene Es1 having two ESes (Env. and Esv).

FIG. 4

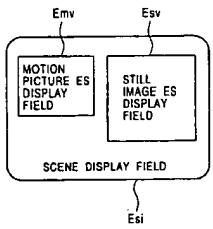


Fig. 4 illustrates the same scene having been adjusted for a low bandwidth transmission. To compensate for the low bandwidth, Env (video content) size was reduced, and Esv (still image content) was increased in size to account for the extra space left by the reduced Env.

Similarly, the scene description was modified to shift the position of Env and Esv to account for their changed size; in Fig. 4, Esv is provided with a larger view area beginning at a location that is shifted left from where it is in Fig. 2, and Env is allocated a smaller portion of the screen to prevent stretching of the video content.

By distinction, when Kalra downgrades or upgrades the quality of video or image content within a Media Stream, Kalra does not modify the placement of the video or image content to account for changes in the quality of the video or image content. Kalra simply compresses this information in place.

Claim 98 - Claim 98 is drawn to a data receiving apparatus according to Claim 95, wherein the scene description specifies whether the at least one ES is to be used to construct the scene.

Kalra - Kalra does not teach or suggest "wherein the scene description processing means transfers a scene description that specifies whether the at least one ES is to be used to construct a scene are used or not."

The Office Action cites to columns 21-22 of Kalra as the basis for rejecting claim 33.

However, as before, this rejection fails to distinguish between the scene description and the elementary stream. Columns 21-22 discuss the process by which the VRML media becomes an Adaptive Media Stream.

This adaptive stream data allows for a reduced data stream to be sent to the client.

However, Kalra is deficient with respect to the "scene description."

That is, there is no scene description that is separate from the media stream, that is sent to the client or that is modified based on the media stream.

Furthermore, there is no component of the VRML format that shows a situation where a stream is simply removed from the VRML. As illustrated in Fig. 17 of Kalra, content is compressed for different transfer states, but not removed.

Claim 99 - Claim 99 is drawn to a data receiving apparatus according to Claim 95, wherein the scene description complexity conforms to the at least one ES.

Kalra - Kalra does not teach or suggest that "*the scene description processing means transfers a scene description whose complexity conforms to the at least one ES.*"

That is, Kalra does not tie that complexity of the scene description to the ES. While Kalra discloses adjusting the resolution of the various components of the VRML data to conform to a transmission capacity, Kalra does not recognize the benefit of changing a scene description based on the changes to the ESes within the scene.

2. **The Examiner erred in rejecting claims 1, 14, 27-30, 32-43, 45, 46, 48-52, 78, 105-115 under 35 U.S.C. § 103 over Kalra in view of The Background Of The Invention section of the specification for the present application ("AAPA").**

Kalra - At least for the reasons provided hereinabove, Kalra fails to disclose, teach, or suggest all claimed features.

In addition:

Claim 1 - Claim 1 is drawn to a data transmission system comprising:

a transmitting apparatus that transmits a scene description; and

a receiving apparatus that constructs a scene according to the scene description;

wherein the transmitting apparatus comprises:

an elementary stream (ES) processing means that transfers at least one ES, which conforms to at least one of a transmission line state and a request issued from the receiving apparatus,

a scene description processing means that transfers and modifies a scene description to conform to a corresponding quality of the at least one ES from the ES processing means by adjusting the properties assigned to the ES within the scene description, and

wherein the transmitting apparatus appends time information to the at least one ES and the scene description; and

wherein the receiving apparatus monitors the time information sent from the transmitting apparatus and detects a delay in transmission using the time information.

AAPA - AAPA does not remedy the deficiencies of Kalra because, like Kalra, AAPA only discloses a mechanism to modify the ESes to reduce bandwidth or bit-rate to account for the limitations of the client device.

Like Kalra, AAPA does not discuss the modification of the scene description to compensate for the changes to the ESes.

On the contrary, it is this very deficiency in the prior art that the present application seeks to remedy.

Kalra and AAPA perform largely the same functions, i.e., compressing or reducing media content based on existing conditions.

However, neither teaches or suggests modifying the scene itself to account for these changes.

Accordingly, neither provides the necessary motivation to modify a scene description based by adjusting the properties assigned to an ES within the scene description.

Instead, a combination of Kalra and AAPA would necessarily yield a system that is similar to what Kalra already does, i.e., produce and modify media streams based on user profiles and/or bandwidth.

This is because the problems and solutions provided by Kalra and AAPA are both very similar, in that both simply provide an adjusted media content.

However, neither teaches or suggests modifying a scene description to account for changes to the media stream.

Since even a combination of the relied upon references would still fail to yield the claimed invention, Appellant submits that a prima facie case of obviousness for claims 1 and 33 has not been presented.

Appellant also notes that the offered combination appears to be a (failed) attempt to reconstruct the claimed invention in hindsight, as there is no basis to combine Kalra and AAPA to produce the present claimed invention.

Claim 14 - Claim 14 is drawn to a data transmitting method for transmitting a scene description that describes at least one elementary stream (ES) used to construct a scene, and constructing the scene according to the scene description, comprising:

> transmitting at least one ES, which conforms to at least one of a transmission line state and a request issued from the receiving side;
>
> transmitting a scene description that conforms to the at least one ES;
>
> appending time information to the transmitted scene description; and
>
> monitoring the time information to detect delays in transmission using the time information.

AAPA - AAPA does not remedy the deficiencies of Kalra because, like Kalra, AAPA only discloses a mechanism to modify the ESes to reduce bandwidth or bit-rate to account for the limitations of the client device.

Like Kalra, AAPA does not discuss the modification of the scene description to compensate for the changes to the ESes.

On the contrary, it is this very deficiency in the prior art that the present application seeks to remedy.

Kalra and AAPA perform largely the same functions, i.e., compressing or reducing media content based on existing conditions.

However, neither teaches or suggests modifying the scene itself to account for these changes.

Accordingly, neither provides the necessary motivation to modify a scene description based by adjusting the properties assigned to an ES within the scene description.

Instead, a combination of Kalra and AAPA would necessarily yield a system that is similar to what Kalra already does, i.e., produce and modify media streams based on user profiles and/or bandwidth.

This is because the problems and solutions provided by Kalra and AAPA are both very similar, in that both simply provide an adjusted media content.

However, neither teaches or suggests modifying a scene description to account for changes to the media stream.

Since even a combination of the relied upon references would still fail to yield the claimed invention, Appellant submits that a prima facie case of obviousness for claims 1 and 33 has not been presented.

Appellant also notes that the offered combination appears to be a (failed) attempt to reconstruct the claimed invention in hindsight, as there is no basis to combine Kalra and AAPA to produce the present claimed invention.

Claims 27-30, 32, 35-39 - Claims 28-30, 32, 35-39 are dependent upon claim 27. Claim 27 is drawn to a data transmitting apparatus for transmitting a scene description that describes at least one elementary stream (ES) used to construct a scene, comprising:

> an ES processing means that transfers at least one ES, which conforms to at least one of a transmission line state and a request issued from a receiving side;
>
> a scene description processing means for transferring and modifying a scene description, in accordance with the at least one ES from the ES processing means, by adjusting the properties assigned to the ES within the scene description.

AAPA - AAPA does not remedy the deficiencies of Kalra because, like Kalra, AAPA only discloses a mechanism to modify the ESes to reduce bandwidth or bit-rate to account for the limitations of the client device.

Like Kalra, AAPA does not discuss the modification of the scene description to compensate for the changes to the ESes.

On the contrary, it is this very deficiency in the prior art that the present application seeks to remedy.

Kalra and AAPA perform largely the same functions, i.e., compressing or reducing media content based on existing conditions.

However, neither teaches or suggests modifying the scene itself to account for these changes.

Accordingly, neither provides the necessary motivation to modify a scene description based by adjusting the properties assigned to an ES within the scene description.

Instead, a combination of Kalra and AAPA would necessarily yield a system that is similar to what Kalra already does, i.e., produce and modify media streams based on user profiles and/or bandwidth.

This is because the problems and solutions provided by Kalra and AAPA are both very similar, in that both simply provide an adjusted media content.

However, neither teaches or suggests modifying a scene description to account for changes to the media stream.

Since even a combination of the relied upon references would still fail to yield the claimed invention, Appellant submits that a prima facie case of obviousness for claims 1 and 33 has not been presented.

Appellant also notes that the offered combination appears to be a (failed) attempt to reconstruct the claimed invention in hindsight, as there is no basis to combine Kalra and AAPA to produce the present claimed invention.

Claim 33 - Claim 33 is drawn to a data transmitting apparatus according to Claim 27, further comprising:

> wherein the scene description processing means transfers a scene description that specifies whether the at least one ES is to be used to construct a scene are used or not.

AAPA - AAPA, like Kalra, does not address the removal of elements from a scene description. AAPA only discloses the reduction or compression of the size of the ESes used in a scene, not changing the scene description based on the ES changes.

Since neither reference teaches or suggests the removal of elements from a scene only compression of elements, this feature is not obvious in view of the references.

Accordingly, Kalra and AAPA fail to teach or suggest all the features of claim 33.

Claim 34 is drawn to a data transmitting apparatus according to Claim 27, wherein the scene description processing means transfers a scene description whose complexity conforms to the at least one ES.

AAPA - AAPA, like Kalra, does not teach or suggest having the complexity of the scene description depend or conform to the complexity of an ES. Instead, both Kalra and AAPA simply address the compression of various elements of the VRML format and ESes, respectively. Neither reference makes the connection that the scene itself would benefit from modification as a result of the changes brought on by compression of the video or image content.

Accordingly, Kalra and AAPA fail to teach or suggest all the features of claim 34.

Claim 40-43, 45, 48-52 - Claim 39-43, 45, 48-52 is dependent upon claim 40. Claim 40 is drawn to a data transmitting method for transmitting a scene description that describes the properties of at least one elementary stream (ES) used to construct a scene, comprising:

> transmitting at least one ES, which conforms to at least one of a transmission line state and a request issued from the receiving side;
>
> transmitting a scene description in accordance with the corresponding quality of the at least one ES;
>
> appending time information to at least one of the transmitted scene description and the at least one ES.

AAPA - AAPA does not remedy the deficiencies of Kalra because, like Kalra, AAPA only discloses a mechanism to modify the ESes to reduce bandwidth or bit-rate to account for the limitations of the client device.

Like Kalra, AAPA does not discuss the modification of the scene description to compensate for the changes to the ESes.

On the contrary, it is this very deficiency in the prior art that the present application seeks to remedy.

Kalra and AAPA perform largely the same functions, i.e., compressing or reducing media content based on existing conditions.

However, neither teaches or suggests modifying the scene itself to account for these changes.

Accordingly, neither provides the necessary motivation to modify a scene description based by adjusting the properties assigned to an ES within the scene description.

Instead, a combination of Kalra and AAPA would necessarily yield a system that is similar to what Kalra already does, i.e., produce and modify media streams based on user profiles and/or bandwidth.

This is because the problems and solutions provided by Kalra and AAPA are both very similar, in that both simply provide an adjusted media content.

However, neither teaches or suggests modifying a scene description to account for changes to the media stream.

Since even a combination of the relied upon references would still fail to yield the claimed invention, Appellant submits that a prima facie case of obviousness for claims 1 and 33 has not been presented.

Appellant also notes that the offered combination appears to be a (failed) attempt to reconstruct the claimed invention in hindsight, as there is no basis to combine Kalra and AAPA to produce the present claimed invention.

Claim 46 - Claim 46 a data transmitting method according to Claim 40, wherein the scene description specifies whether to use the at least one ES.

Claim 78 - Claim 78 is drawn to a data transmission system comprising:

a transmitting apparatus that transmits a scene description; and

a receiving apparatus that constructs a scene according to the scene description;

wherein the transmitting apparatus comprises:

a elementary signal (ES) processor that transfers at least one ES used to construct the scene, in accordance to the transmission capacity, and

a scene description processor that transmits a scene description and a time information, the scene description conforming to a transmission capacity, the transmission capacity being derived from at least one of a transmission line state, a request issued from the receiving apparatus, or known available resources of the receiving apparatus;

wherein the receiving apparatus monitors the time information sent from the transmitting apparatus to detect a delay in the transmission; and

wherein the scene description includes objects, the objects comprising at least one node and at least one signal used to construct the scene, each the node describing an object or a relationship between objects.

AAPA - AAPA does not remedy the deficiencies of Kalra because, like Kalra, AAPA only discloses a mechanism to modify the ESes to reduce bandwidth or bit-rate to account for the limitations of the client device.

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However, neither teaches or suggests modifying the scene itself to account for these changes.

Accordingly, neither provides the necessary motivation to modify a scene description based by adjusting the properties assigned to an ES within the scene description.

Instead, a combination of Kalra and AAPA would necessarily yield a system that is similar to what Kalra already does, i.e., produce and modify media streams based on user profiles and/or bandwidth.

This is because the problems and solutions provided by Kalra and AAPA are both very similar, in that both simply provide an adjusted media content.

However, neither teaches or suggests modifying a scene description to account for changes to the media stream.

Since even a combination of the relied upon references would still fail to yield the claimed invention, Appellant submits that a prima facie case of obviousness for claims 1 and 33 has not been presented.

Appellant also notes that the offered combination appears to be a (failed) attempt to reconstruct the claimed invention in hindsight, as there is no basis to combine Kalra and AAPA to produce the present claimed invention.

Claims 105-108, 116-120 - The Second Amendment After Final Action Under 37 C.F.R. 1.116 of January 8, 2009 includes the replacement of finally rejected claims 110 and 112-115 with newly added claims 116-120.

Claims 106-108, 116-120 are dependent upon claim 105. Claim 105 is drawn to a data receiving method for receiving a scene description that describes the properties of at least one elementary stream (ES) used to construct a scene, comprising:

> receiving at least one ES, which conforms to at least one of a transmission line state and a request issued from a receiving side;
>
> receiving a scene description in accordance with the corresponding quality of the at least one ES;
>
> wherein time information is appended to at least one of the received scene description and the at least one ES.

AAPA - AAPA does not remedy the deficiencies of Kalra because, like Kalra, AAPA only discloses a mechanism to modify the ESes to reduce bandwidth or bit-rate to account for the limitations of the client device.

Like Kalra, AAPA does not discuss the modification of the scene description to compensate for the changes to the ESes.

On the contrary, it is this very deficiency in the prior art that the present application seeks to remedy.

Kalra and AAPA perform largely the same functions, i.e., compressing or reducing media content based on existing conditions.

However, neither teaches or suggests modifying the scene itself to account for these changes.

Accordingly, neither provides the necessary motivation to modify a scene description based by adjusting the properties assigned to an ES within the scene description.

Instead, a combination of Kalra and AAPA would necessarily yield a system that is similar to what Kalra already does, i.e., produce and modify media streams based on user profiles and/or bandwidth.

This is because the problems and solutions provided by Kalra and AAPA are both very similar, in that both simply provide an adjusted media content.

However, neither teaches or suggests modifying a scene description to account for changes to the media stream.

Since even a combination of the relied upon references would still fail to yield the claimed invention, Appellant submits that a prima facie case of obviousness for claims 1 and 33 has not been presented.

Appellant also notes that the offered combination appears to be a (failed) attempt to reconstruct the claimed invention in hindsight, as there is no basis to combine Kalra and AAPA to produce the present claimed invention.

Claim 109 - Claim 109 is drawn to a data receiving method according to Claim 105, wherein the scene description specifies whether to use the at least one ES.

Conclusion

The claims are considered allowable for the same reasons discussed above, as well as for the additional features they recite.

Reversal of the Examiner's decision is respectfully requested.

CONCLUSION

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-0013, under Order No. SON-2198 from which the undersigned is authorized to draw.

Dated: November 16, 2009

Respectfully submitted,

By _____
Christopher M. Tobin
Registration No.: 40,290
RADER, FISHMAN & GRAUER PLLC
Correspondence Customer Number: 23353
Attorney for Applicant